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Title: Localized Similar Image Texture in Images of Sample Laser Confocal
Microscope for Area: FY15 DE07 SW C1 Zone 1 & 2 Section b

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Localized Similar Image Texture in Images of
Sample Laser Confocal Microscope for Area:
FY15 DE07 SW C1 Zone 1 & 2 Section b

James G. Wendelberger

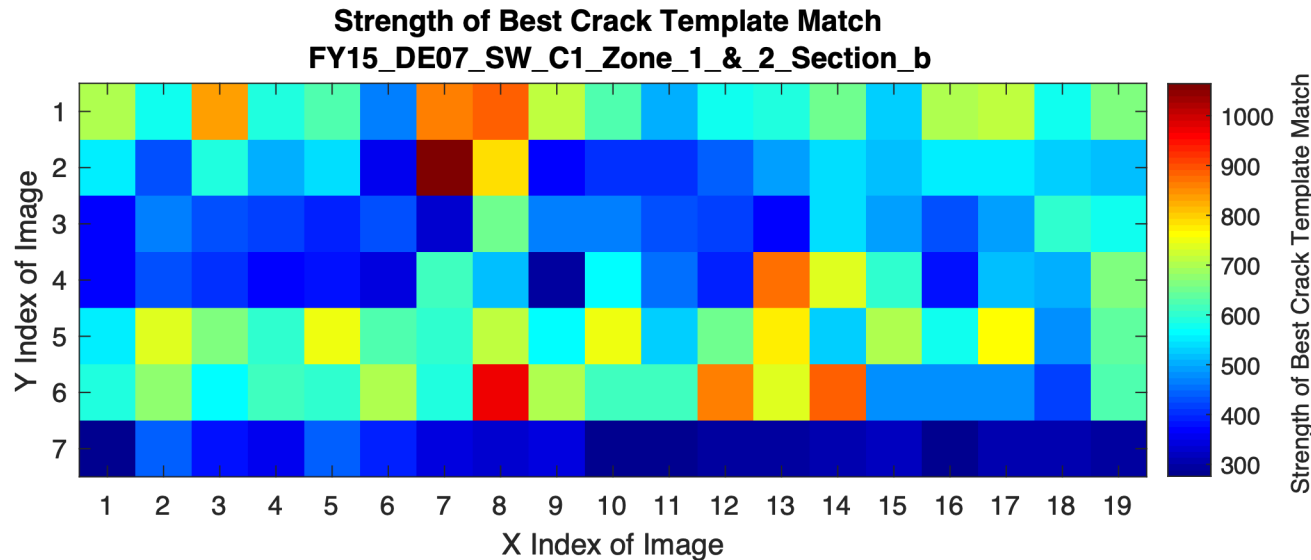
CCS-6

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14 February 2019

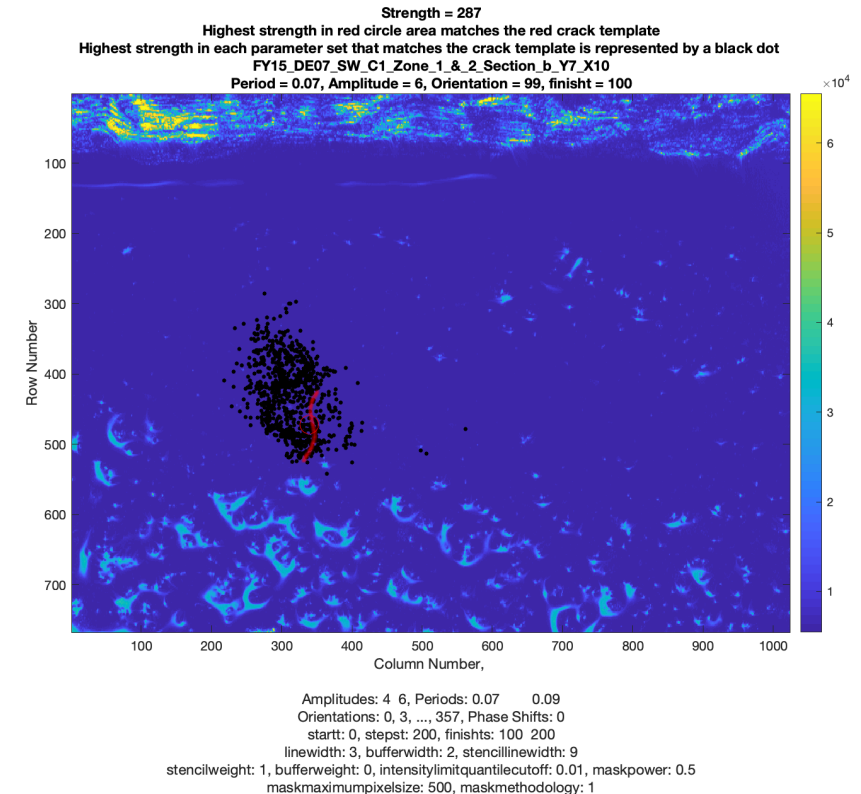
FY15_DE07_SW_C1_Zone_1_&_2_Section_b

- Summary Curve Strengths

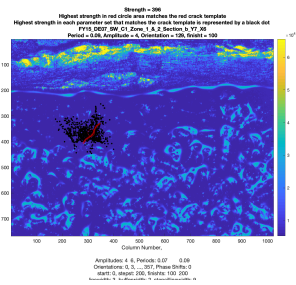
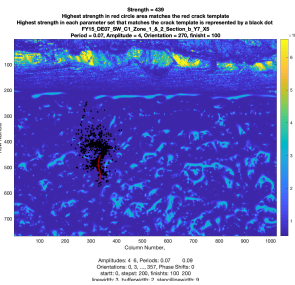
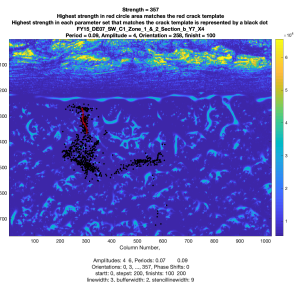
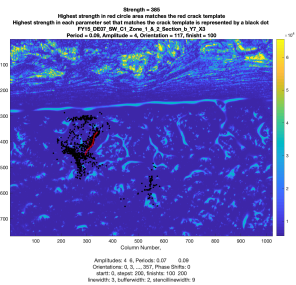
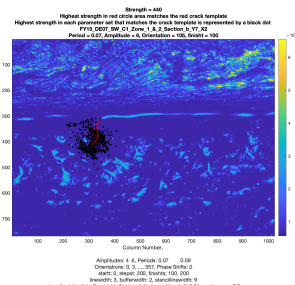
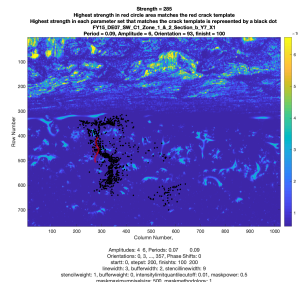


Amplitudes: 4 6, Periods: 0.07 0.09
Orientations: 0, 3, ..., 357, Phase Shifts: 0
startt: 0, stepst: 200, finishts: 100 200
linewidth: 3, bufferwidth: 2, stencillinewidth: 9
stencilweight: 1, bufferweight: 0
intensitylimitquantilecutoff: 0.01, maskpower: 0.5
maskmaximumpixelsize: 500, maskmethodology: 1

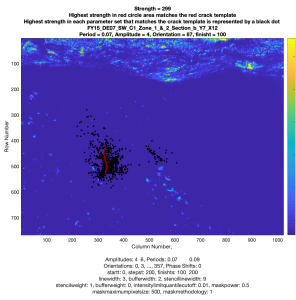
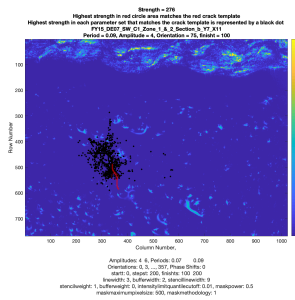
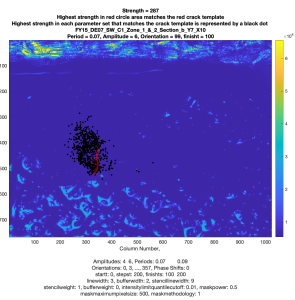
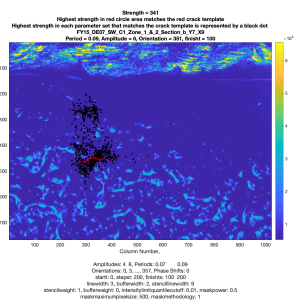
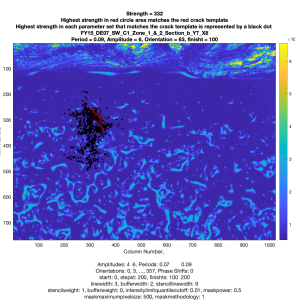
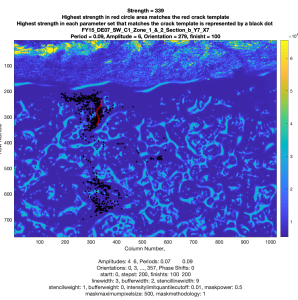
- Look at Detail of Row Y7 (next slide)
 - Notice Similar Location of Matching Mask Black Dots
 - Example Y7X10:



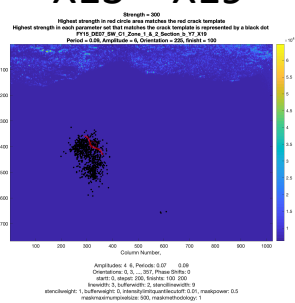
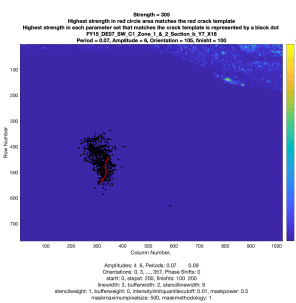
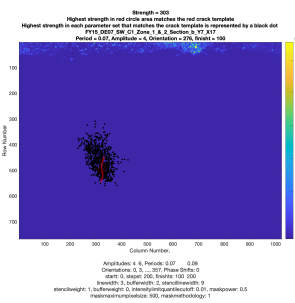
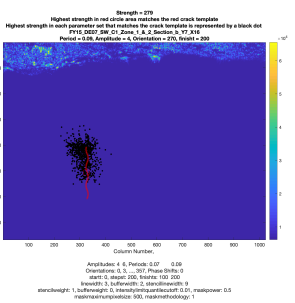
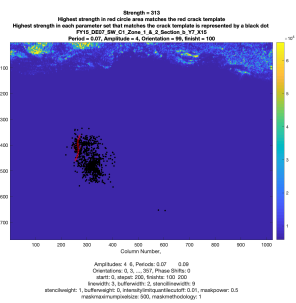
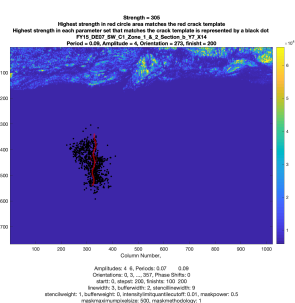
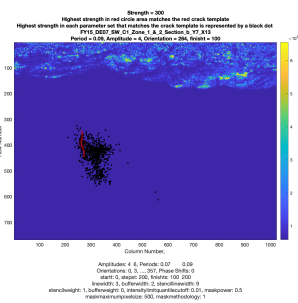
Why do the matches occur in the same general area of the image for Y7, X1-X19?



X1 – X6



X7 – X12



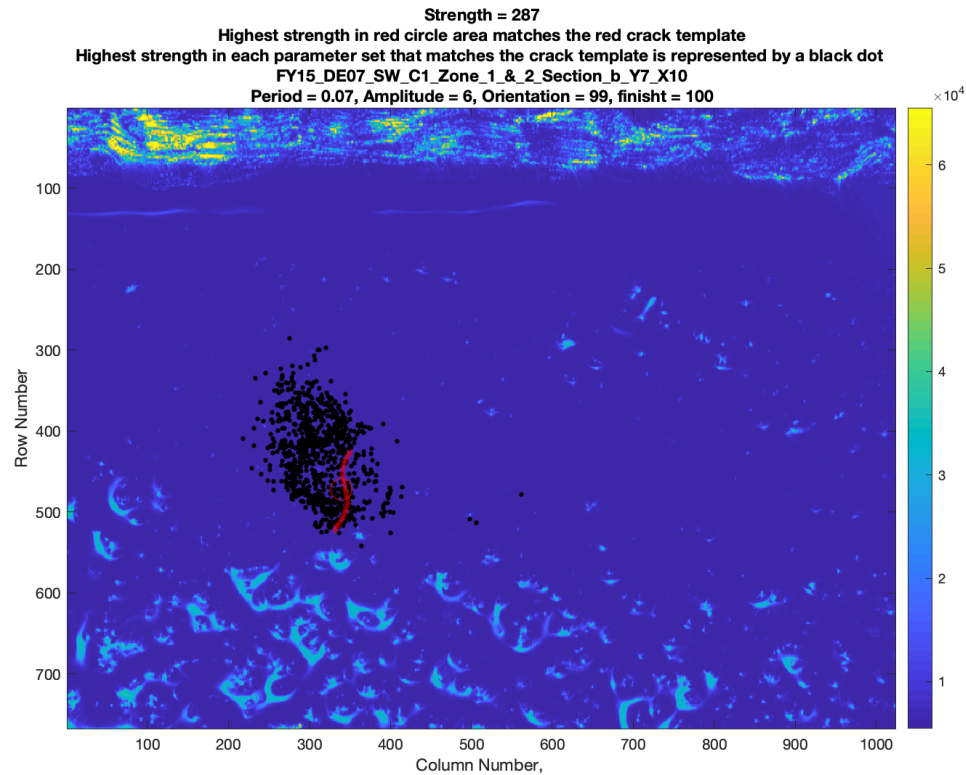
X13 – X19

Possible Causes of “Localized Similar Image Texture”?

- Programming error?
 - Pro: looks very odd
 - Con: same procedure identifies the cracks Michael identified visually
 - Con: running the program on Y7X10 alone yields the same image (next slide)
- Something in the microscope?
 - Pro: Something in the microscope that doesn't change from image to image
 - Con: Not seen before in the Laser Confocal Microscope (LCM)
- Other Ideas?

Y7X10: As a group, Individually

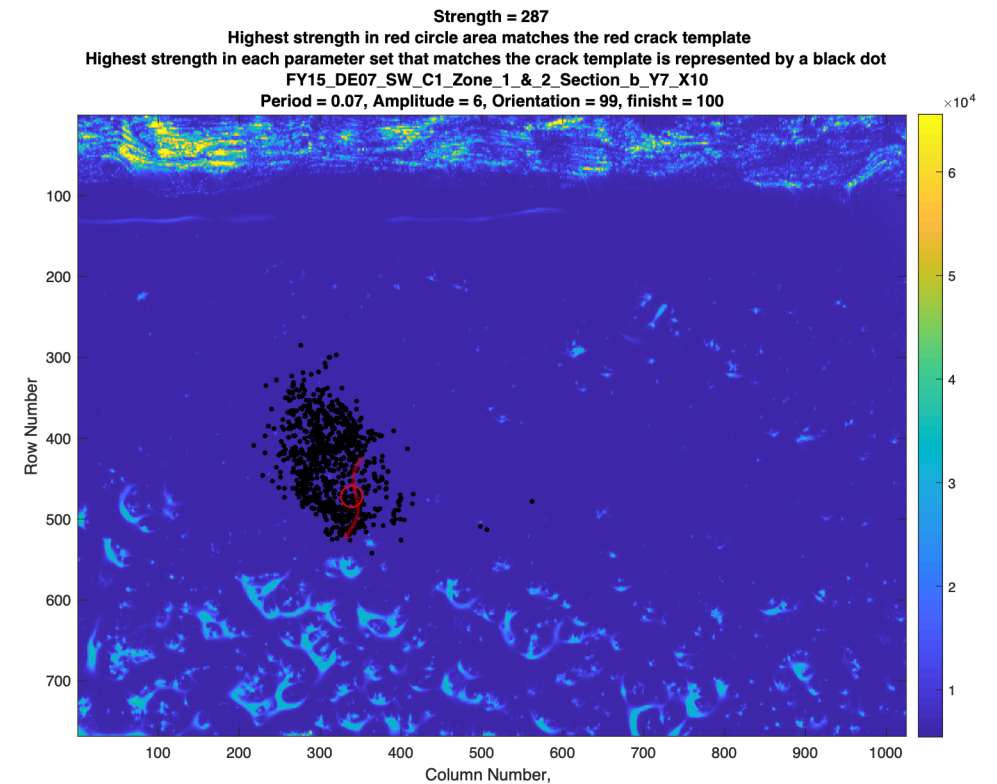
Analyzed as a group of 133 images



Amplitudes: 4 6, Periods: 0.07 0.09
Orientations: 0, 3, ..., 357, Phase Shifts: 0
start: 0, step: 200, finish: 100 200
linewidth: 3, bufferwidth: 2, stencilwidth: 9
stencilweight: 1, bufferweight: 0, intensitylimitquantilecutoff: 0.01, maskpower: 0.5
maskmaximumpixelsize: 500, maskmethodology: 1

- Identical Analysis Images

Analyzed individually



Amplitudes: 4 6, Periods: 0.07 0.09
Orientations: 0, 3, ..., 357, Phase Shifts: 0
start: 0, step: 200, finish: 100 200
linewidth: 3, bufferwidth: 2, stencilwidth: 9
stencilweight: 1, bufferweight: 0, intensitylimitquantilecutoff: 0.01, maskpower: 0.5
maskmaximumpixelsize: 1000, maskmethodology: 1